

STREAM RESTORATION AT TOANDOS PENINSULA

The Navy property on Toandos Peninsula includes a stream that has small populations of coho salmon and cutthroat trout. Chum salmon have also been found in this stream. The stream has about 500-1000 feet in the lower portion of the stream that is passable. Two culverts under a logging road cut off access to fish, according to Jerry Manual from Washington Department of Fisheries. Since the logging road has washed out in two locations above the culverts, there is presently no vehicle access and thus no need for the culverts.

The mouth of the stream includes a small pond that provides winter habitat for coho and cutthroat. This pond has cattails growing in one portion of the pond. A concern is that the cattails may take over the pond, if allowed to grow unchecked. We're uncertain how long the cattails have been there, but there have been some changes in the stream due to the landslide.

We propose to enhance the stream by doing the following:

1. Planting trees and shrubs on the hillside where the road was washed out.
2. Remove the two culverts. This will include stabilizing the new streambanks by planting trees and grasses.
3. Remove cattails from the pond down in the lower section of the stream to prevent them from spreading and taking over the whole pond.
4. Walk the stream up above and determine whether woody debris inputs are adequate. Review Portage Creek project done by Jeff Cederholm to see if "logger's choice" method of increasing woody debris was determined to be effective. Depending on the results of these actions, we may fell some trees into the stream in an attempt to increase the number of pools.

Since one of the criteria for damages is impact to salmon populations and this project enhances critical habitat for salmon, this qualifies as in-kind, off-site mitigation. The streams are small, but water quality is good and development potential is low.

Most of the work would be done by hand, since there is no way to get heavy equipment in there. This will increase the cost of the project. It would be done with both in-house personnel and contractors.